



**STATE OF TENNESSEE
TENNESSEE BUREAU OF INVESTIGATION**

**REQUEST FOR INFORMATION
FOR
LAW ENFORCEMENT SPECIFIC MESSAGING SWITCH SOFTWARE AND
MAINTENANCE AND SUPPORT OF SOFTWARE
RFI 34800-042022**

1. STATEMENT OF PURPOSE:

The State of Tennessee, Tennessee Bureau of Investigation issues this Request for Information ("RFI") for the purpose of gaining information to procure a law enforcement specific messaging switch software that allows queries to be made to and returns to be received from various internal and external databases and communicates with law enforcement agencies.

2. BACKGROUND:

The State seeks to replace a messaging switch software that has been in place since about 2001. The State currently owns the messaging switch software known as the TIES (Tennessee Information Enforcement System) Message Switch. In 2017, the TIES Message Switch was upgraded but continued to maintain the same functionality. At that time, the TIES Message Switch was converted from Oracle to Microsoft SQL Server. Law enforcement agencies depend on the TIES Message Switch for critical real-time communications. To provide a modern and secure solution for the future of law enforcement communications, the State seeks a replacement of the TIES Message Switch with a messaging switch software that is capable of the following as organized into various topics:

2.1. Computing Environment

- 2.1.1. The software must run on a Microsoft Windows operating system.
- 2.1.2. The database must be Microsoft SQL Server software to conform to State's current computing environment.

- 2.1.3. The messaging switch software must be based on up-to-date programming languages and technology for security reasons.
- 2.1.4. All components of the messaging switch software must be CJIS security Policy compliant as found at the following website: CJIS Security Policy Resource Center — FBI.
- 2.1.5. Production and Test Environments shall conform to the following: State sets up and hosts test and production environments on virtual servers using Microsoft Hyper-V with limits of 5 TB for individual disk, multiple disks per server and must support SMB or NFS (network file system) storage. Messaging switch software provider shall be responsible for configuring, installing, and testing its software with no impact to current production TIES Message Switch.
- 2.1.6. Detail what hardware and third-party software (if any) is needed for each environment. Any third-party software costs/licenses will be borne by messaging switch software provider.
- 2.1.7. Networking should be based on high-speed TCP/IP (ethernet).

2.2. Communication Standards Compliance

- 2.2.1. Messaging switch software must be NIEM compliant.
- 2.2.2. Messaging switch software must meet all communication standards to communicate with NCIC and support 100 % of all current and future functions of NCIC.
- 2.2.3. Due to the project's time constraints, messaging switch software provider must have an established product that is NCIC compliant.
- 2.2.4. Messaging switch software must meet all communication standards to communicate with NLETS and support all available NLETS transactions and any/new or future NLETS transactions
- 2.2.5. Messaging switch software must meet all communication standards with law enforcement and be DMPP 2020 compliant with Tennessee specific protocol variations. All current NCIC vendor applications in Tennessee should be tested.
- 2.2.6. Message keys/message management, including current and any future NCIC, NLETS, and TN specific message keys, must be supported by messaging switch software provider.
- 2.2.7. Messaging switch software should have the capability of verifying agency operators' certifications by working with current State contractor that provides the certification system.
- 2.2.8. Must adhere to and support the Tennessee standard for acceptance and rejection of messages. This is Tennessee specific.
- 2.2.9. Describe how the provider of the messaging switch software would manage communication standard changes that could create issues with RMS and dispatch software vendors across the State.

- 2.2.10. Messaging switch software should have a Secure Web-based Restful API that would allow for modifications and make it easier for the State to “piggyback” on to the messaging switch.

2.3. Connections

- 2.3.1. Messaging switch software must be able to connect to all 288 interfaces. Messaging Switch software must be able to connect to law enforcement agencies, NCIC, NLETS, and TN files (Must be able to connect to all TN specific files including but not limited to Driver License, registrations, computerized criminal history (CCH), etc.)
- 2.3.2 Messaging switch software must include a self-monitoring dashboard that provides changes to agencies and connectivity and produces a real-time alert to both messaging switch software vendor, State, and agency contacts.
- 2.3.3 It is preferable that the messaging switch software have a system administrative console (SAC) that includes a mechanism to be able to see and monitor the following: certifications, creating new lines and connections, rerouting, line monitor, the ability to visually see traffic on a line, disconnect and restart lines, delete messages, manage message queue, all definitions of lines, addition of information about lines and contact information on all terminal agency coordinators (TACs).

2.4. Core Central

- 2.4.1. Messaging switch software must reside on an on-premises TBI server. No cloud solution shall be considered.
- 2.4.2. Messaging switch software must have all functionality as current TIES Message Switch.
- 2.4.3. Messaging switch software must have an uptime of greater than 99 % of time/ 24 hours a day 7 days a week with exception of planned outages
- 2.4.4. Detail your messaging switch software’s performance metrics. For instance, state the speed of the messaging switch software and stability of messaging switch software, the response time (sub second---individual response), how many queries or responses within a particular period of time, how much can the messaging switch software handle and how quickly, how quickly can you clear the queue, with concurrent connections, how many connections can happen at once, and how quickly can the messaging switch software be restarted or brought back on-line if it goes down.
- 2.4.5. How many current installations of law enforcement messaging switch software do you have?
- 2.4.6. Describe how you would provide transition, training of State’s messaging switch software operators and testing of your messaging switch software.
- 2.4.7. How much memory is needed for your messaging switch software?

- 2.4.8. How does your messaging switch software handle validations and reporting errors—for example, if an agency has something wrong where they are using an old format or consistently having issues with codes, etc., the reporting errors could identify deficiencies from a training standpoint allowing the State to see that there is an issue and how to correct it.
- 2.4.9. Does your messaging switch software support load balancing, redundancy, or fail over to a secondary server, and if so, please describe?

2.5. Archiving

- 2.5.1. Messaging switch software must have a mechanism of archiving all transactions. Describe your messaging switch software's archiving features.
- 2.5.2. It would be ideal for Messaging Switch software to have a mechanism of searching and retrieving TIES Message Switch archived messages. Please state if your product is capable of searching and retrieving TIES Message Switch archived messages.

2.6. Miscellaneous Information

- 2.6.1. Define responsibilities of the State for messaging switch software including estimated time that State may need to spend on installation, testing, and go-live processes.
- 2.6.2. There shall be no tandem messaging switch software. When new messaging switch software goes live, TIES Message Switch will be off.
- 2.6.3. Identify any third-party software that would be needed. State will not enter into any third-party software licenses.
- 2.6.4. Project must be completed no later than December 2023. Describe project timeline. Project must be completed within one calendar year.
- 2.6.5. A requirement for any provider of the messaging switch software will be that all employees working on the project must have fee fingerprints taken, eligibility form completed, and signed CJIS security addendum, and out of state employees must supply a driver license.
- 2.6.6. Describe all that would be included under a maintenance and support agreement including any tiers of support that could be offered. Please note whether message key changes are included under maintenance and support or would be considered a change order. If NCIC changes are made, is this included under the maintenance and support agreement?
- 2.6.7. Maintenance and support must include a helpdesk 24 hours a day and seven days a week, management of all message keys, etc. Maintenance and support must include updates, upgrades, releases, repairs, modifications, new development, patches, or bug fixes Maintenance and Support of the software shall extend for the entire term of any agreement and shall include all current functionality of the software

and any changes, modifications, upgrades, enhancements, or any new functions or features to the software that may occur over the agreed upon term.

3. COMMUNICATIONS:

- 3.1. Please submit your response to this RFI to:
Message.SwitchRFI@tn.gov
- 3.2. Please feel free to contact the Tennessee Bureau of Investigation with any questions regarding this RFI. The main point of contact will be:
Message.SwitchRFI@tn.gov
- 3.3. Please reference RFI # 34800-042022 with all communications to this RFI.

4. RFI SCHEDULE OF EVENTS:

EVENT		TIME (Central Time Zone)	DATE (all dates are State business days)
1.	RFI Issued		May 2, 2022
2.	Questions Submitted by Potential Respondents		May 9, 2022
3.	Answers Posted to Questions		May 16, 2022
4.	RFI Response Deadline		June 1, 2022

5. GENERAL INFORMATION:

- 5.1. Please note that responding to this RFI is not a prerequisite for responding to any future solicitations related to this project and a response to this RFI will not create any contract rights. Responses to this RFI will become property of the State.
- 5.2. The information gathered during this RFI is part of an ongoing procurement. To prevent an unfair advantage among potential respondents, the RFI responses will not be available until after the completion of evaluation of any responses, proposals, or bids resulting from a Request for Qualifications, Request for Proposals, Invitation to Bid or other procurement

method. In the event that the state chooses not to go further in the procurement process and responses are never evaluated, the responses to the procurement including the responses to the RFI, will be considered confidential by the State.

5.3. The State will not pay for any costs associated with responding to this RFI.

6. INFORMATIONAL FORMS:

The State is requesting the following information from all interested parties. Please fill out the following forms:

RFI #34800-042022	
TECHNICAL INFORMATIONAL FORM	
1. RESPONDENT LEGAL ENTITY NAME:	
2. RESPONDENT CONTACT PERSON:	
	Name, Title:
	Address:
	Phone Number:
	Email:
3. BRIEF DESCRIPTION OF EXPERIENCE PROVIDING SIMILAR SCOPE OF SERVICES/PRODUCTS	
4. Provide a proposed timeline for the project. Project must be completed within one calendar year and prior to December 2023.	
5. Detail what hardware or third-party software would be needed to operate the messaging switch software.	
6. Describe how messaging switch software provider will manage communication standard changes that could create issues with RMS providers across the State.	
7. Describe your product's performance metrics.	
8. Describe your messaging switch software's archiving features	
9. Outline all requirement of messaging switch software and how your product meets or exceeds the expectation.	
10. Define responsibilities of the State for messaging switch software including estimated time that State may need to spend on installation, testing, and go-live.	
11. Describe your product's maintenance and support plan.	
12. Describe how you would provide transition, training of State's messaging switch software operators and testing of product.	
13. Describe how your messaging switch software supports load balancing, redundancy, or fail over to a secondary server.	

COST INFORMATIONAL FORM
1. Describe what pricing units you typically utilize for similar services or goods (e.g., per hour, each, etc.): Do not describe with a time and materials approach. Describe as fixed pricing.
2. Describe the typical price range for similar services or goods
3. Describe what services are included in maintenance and support and pricing for four years of maintenance and support

ADDITIONAL CONSIDERATIONS
1. Please provide input on alternative approaches or additional things to consider that might benefit the State: